

Animals

2-2 The student will demonstrate an understanding of the needs and characteristics of animals as they interact in their own distinct environments. (Life Science)

2-2.5 Illustrate the various life cycles of animals (including birth and stages of development).

Taxonomy Level: 2.2-B Understand Conceptual Knowledge

Previous/Future knowledge: In kindergarten (K-2.3), students matched parents with their offspring. In 1st grade (1-2.4), students summarized the life cycle of plants. In 3rd grade (3-2.1), students will illustrate the life cycles of seed plants and various animals and summarize how the plants and animals grow and adapt to their environments.

It is essential for students to know that all animals go through a life cycle.

Life cycle

- The birth and stages of development organisms go through during their life span and ends with the organism dying

There are two ways that animals are born: live from the mother or hatched from eggs.

- Some examples of live births are humans, dogs, whales, or deer.
- Some examples of hatching from eggs are birds, fish, sea turtles, alligators, or butterflies.

Once the animals are born, their stages of development can be different.

- Some animals, for example chickens, are born looking like their parents, and continue to grow into adult chickens.
- Other animals, for example frogs and moths, are born looking different from their parents and go through different stages and change considerably at each stage.

NOTE TO TEACHER: Some animal species within a group may hatch from eggs or give live birth that is different from most of the species. For example some type of rattlesnakes, guppies, and sharks give live birth, while the duckbill platypus, a mammal, lays eggs.

It is not essential for students to experience many different types of life cycles, but they should have a few experiences at great depth to make the learning foundational.

Assessment Guidelines:

The objective of this indicator is to *illustrate* various life cycles of animals; therefore, the primary focus of assessment should be to find specific examples or illustrations of animal life cycles, including birth and stages of development. However, appropriate assessments should also require students to *classify* by sequencing the correct order of the stages of development of a particular animal; or *compare* the life cycles of various animals.